Application No. 11/399,869 Filed: April 7, 2006

Group Art Unit: 3662

IN THE DRAWINGS:

Applicant thanks the Examiner for acknowledging and accepting the replacement sheet of

drawings filed on December 29, 2006.

IN THE CLAIMS:

Please amend claims 1-2, 9 and 12-16 as follows:

1. (CURRENTLY AMENDED) A Raman spectrometry apparatus containing a

source of excitation, optical means of excitation directing a beam of excitation derived from that

source on the sample containing an inlet diffusion slot slit, a spectral dispersion system, means

for selecting the Raman energy, a detector, optical detection means directing the Raman energy

thus collected and selected to the detector, characterized in that the optical means of excitation

causes the beam of excitation to be dispersed by the dispersion system, said optical means of

excitation containing an inlet slot slit and an outlet slot slit of excitation constituted by the inlet

diffusion slot slit and selecting the wavelength of excitation, characterized in that said means for

selecting the Raman energy includes an operatable micromirror reflective system.

2. (CURRENTLY AMENDED) The Raman spectrometry apparatus according to

claim 1 wherein the inlet slot slit of excitation lies roughly in or about the focal plane of the

dispersion system.

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3. (PREVIOUSLY PRESENTED) The Raman spectrometry apparatus according to claim 1, characterized in that the means of selection of the Raman energy comprises a holographic filter which stops the wavelength of excitation.

4. (CANCELLED)

- 5. (PREVIOUSLY PRESENTED) Raman spectrometry apparatus according to claim 1, characterized in that means for sampling a portion of the beam of excitation is placed between an output excitation slit and the sample and enables control of the wavelength of excitation at its maximum of energy by microrotation of the dispersion system.
- 6. (PREVIOUSLY PRESENTED) A Raman spectrometry apparatus comprising a source of optical excitation source producing optical excitation energy, an optical train for receiving said optical excitation energy and directing said optical excitation energy on a sample through an inlet slit, a spectral dispersion system, a Raman energy selection device, a detector positioned to receive said selected Raman energy, optical detection means directing the Raman energy thus collected and selected to the detector, said optical excitation source causing said optical excitation energy to be dispersed by said spectral dispersion system, and said optical train comprising an output slit and selecting the wavelength of excitation, said Raman energy selection device comprising an operatable micromirror reflective system.

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7. (PRESENTLY PRESENTED) The Raman spectrometry apparatus of claim 1

wherein the inlet slit of excitation lies in a focal plane common to the spectral dispersion system.

8. (PRESENTLY PRESENTED) The Raman spectrometry apparatus of claim 1

wherein the spectral dispersion system comprises a holographic filter for blocking the

wavelength of excitation.

9. (CURRENTLY AMENDED) The Raman spectrometry apparatus of claim 1

further comprising a sampler between the output slot slit and the sample, wherein the sampler

samples a portion of the optical excitation energy and controls the wavelength of excitation at its

maximum of energy by microrotation of the dispersion system.

10. (PREVIOUSLY PRESENTED) A spectrometry apparatus comprising:

an excitation source producing excitation energy;

an excitation director guiding said excitation from the excitation source onto a sample;

a collector receiving energy diffused by the sample;

a spectral dispersion system receiving energy diffused by said sample and collected by

said collector outputting spectrally dispersed diffused energy;

a micromirror reflective system for receiving the output of said spectral dispersion

system, and comprising micromirrors and a controller for orienting said micromirrors to select a

wavelength;

a detector for receiving the output of said micromirror reflective system.

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11. (PREVIOUSLY PRESENTED) The Raman spectrometry apparatus according to

claim 2, characterized in that the means of selection of the Raman energy includes a holographic

filter which stops the wavelength of excitation.

12. (CURRENTLY AMENDED) The Raman spectrometry apparatus according to

claim 2, characterized in that means for sampling a portion of the beam of excitation are placed

between an outlet slot slit of excitation and the sample and enable to control the wavelength of

excitation at its maximum of energy by microrotation of the dispersion system.

13. (CURRENTLY AMENDED) The Raman spectrometry apparatus according to

claim 3, characterized in that means for sampling a portion of the beam of excitation are placed

between an outlet slot slit of excitation and the sample and enable to control the wavelength of

excitation at its maximum of energy by microrotation of the dispersion system.

14. (CURRENTLY AMENDED) A spectrometry apparatus as in claim 6, wherein

said excitation source producing excitation energy is a laser.

15. (CURRENTLY AMENDED) A spectrometry apparatus as in claim 6 10,

wherein said collector receiving energy diffused by the sample comprises an inlet diffusion slit.

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- 16. (CURRENTLY AMENDED) A spectrometry apparatus as in claim 6 10, wherein said spectrally dispersed diffused energy is in a Raman emission.
- 17. (PREVIOUSLY PRESENTED) A Raman spectrometry apparatus as in claim 6, wherein said optical train comprises, in part, said spectral dispersion system.
- 18. (PREVIOUSLY PRESENTED) A Raman spectrometry apparatus as in claim 6, wherein said Raman energy selection device comprises a filter.